

### Abstract

The present invention relates to the different roles inorganic ion receptors have in cellular and body processes.

The present invention features: (1) molecules which can

5 modulate one or more inorganic ion receptor activities, preferably the molecule can mimic or block an effect of an extracellular ion on a cell having an inorganic ion receptor, more preferably the extracellular ion is  $\text{Ca}^{2+}$  and the effect

10 is on a cell having a calcium receptor; (2) inorganic ion receptor proteins and fragments thereof, preferably calcium receptor proteins and fragments thereof; (3) nucleic acids encoding inorganic ion receptor proteins and fragments

thereof, preferably calcium receptor proteins and fragments thereof; (4) antibodies and fragments thereof, targeted to

15 inorganic ion receptor proteins, preferably calcium receptor protein; and (5) uses of such molecules, proteins, nucleic acids and antibodies.